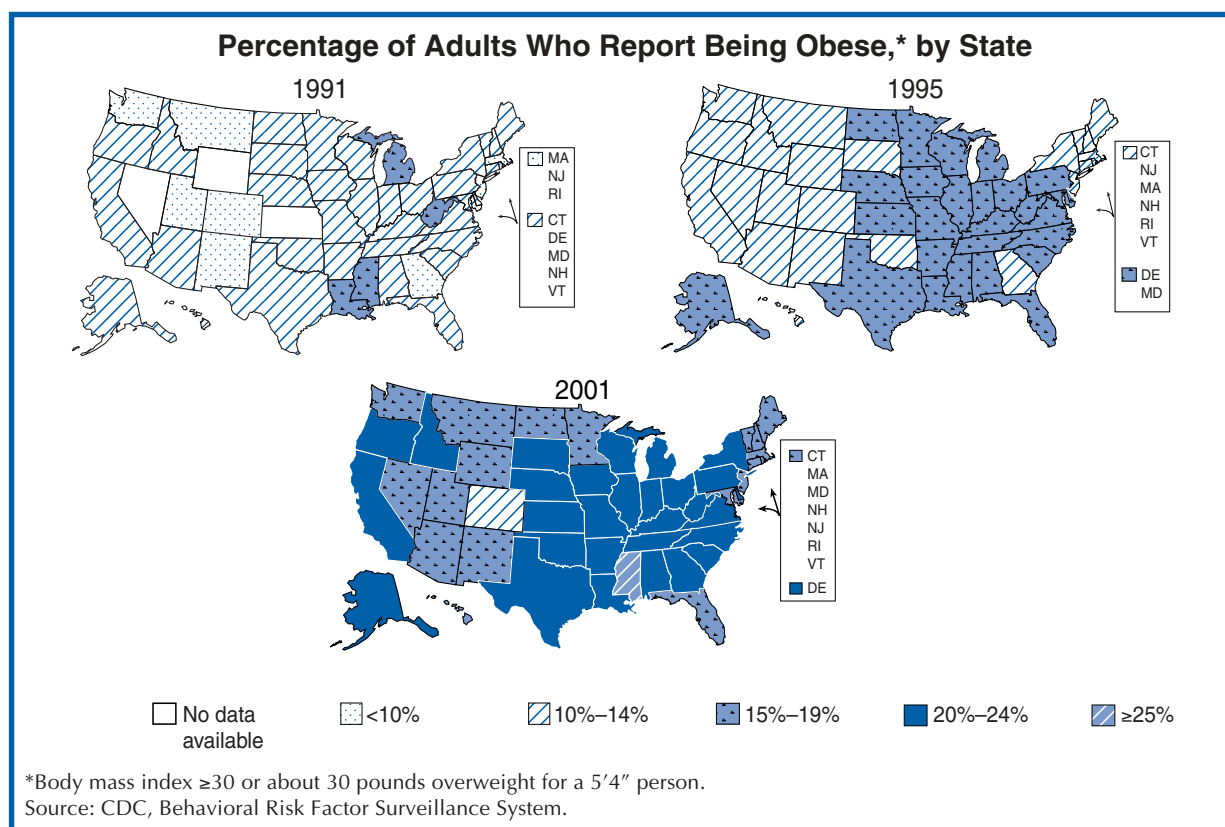




# Physical Activity and Good Nutrition: Essential Elements to Prevent Chronic Diseases and Obesity 2003



*“As a society, we can no longer afford to make poor health choices such as being physically inactive and eating an unhealthy diet; these choices have led to a tremendous obesity epidemic. As policy makers and health professionals, we must embrace small steps toward coordinated policy and environmental changes that will help Americans live longer, better, healthier lives.”*

Vice Admiral Richard H. Carmona, M.D., M.P.H., F.A.C.S  
United States Surgeon General  
Acting Assistant Secretary for Health

## The Importance of Physical Activity and Good Nutrition

Chronic diseases account for 7 of every 10 U.S. deaths and for more than 60% of medical care expenditures. In addition, the prolonged illness and disability associated with many chronic diseases decrease the quality of life for millions of Americans.

Much of the chronic disease burden is preventable. Physical inactivity and unhealthy eating contribute to obesity, cancer, cardiovascular disease, and diabetes. Together, these two behaviors are responsible for at least 300,000 deaths each year. Only tobacco use causes more preventable deaths in the United States. People who avoid the behaviors that increase their risk for chronic diseases can expect to live healthier and longer lives.

### The Obesity Epidemic

Following dramatic increases in overweight and obesity among U.S. adults between 1987 and 2000, obesity has reached epidemic proportions; nearly 59 million adults are obese. Moreover, the epidemic is not limited to adults: the percentage of young people who are overweight has more than doubled in the last 20 years. Of children and adolescents aged 6–19 years, 15%—about 9 million young people—are considered overweight.

People who are overweight are at increased risk for heart disease, high blood pressure, diabetes, arthritis-related disabilities, and some cancers. The estimated annual cost of obesity and overweight in the United States is about \$117 billion.

Promoting regular physical activity and healthy eating and creating an environment that supports these behaviors are essential to reducing this epidemic of obesity.

### Lack of Physical Activity

Regular physical activity reduces people's risk for heart attack, colon cancer, diabetes, and high blood pressure, and may reduce their risk for stroke. It also helps to control weight; contributes to healthy bones, muscles, and joints; reduces falls among the elderly; helps to relieve the pain of arthritis; reduces symptoms of anxiety and depression; and is associated with fewer hospitalizations, physician visits, and medications. Moreover, physical activity need not be strenuous to be beneficial; people of all ages benefit from moderate physical activity, such as 30 minutes of brisk walking five or more times a week.

Despite the proven benefits of physical activity, more than 60% of American adults do not get enough physical activity to provide health benefits. More than 25% are not active at all in their leisure time. Activity decreases with age, and sufficient activity is less common among women than men and among those with lower incomes and less education.

Insufficient physical activity is not limited to adults. More than a third of young people in grades 9–12 do not regularly engage in vigorous physical activity. Daily participation in high school physical education classes dropped from 42% in 1991 to 29% in 1999.

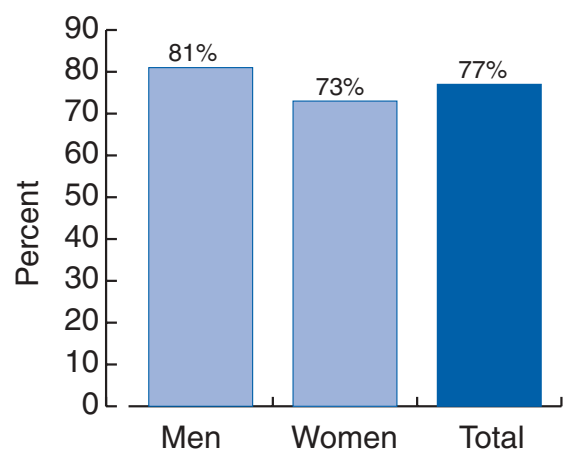
### The Critical Role of Healthy Eating

Research shows that good nutrition lowers people's risk for many chronic diseases, including heart disease, stroke, some types of cancer, diabetes, and osteoporosis. For example, for at least 10 million Americans at risk for type 2 diabetes, proper nutrition and physical activity can sharply lower their chances of getting the disease.

Although Americans are slowly adopting healthier diets, a large gap remains between recommended dietary patterns and what Americans actually eat. Only about one-fourth of U.S. adults eat the recommended five or more servings of fruits and vegetables each day.

Poor eating habits are often established during childhood. More than 60% of young people eat too much fat, and less than 20% eat the recommended five or more servings of fruits and vegetables each day.

**Percentage of Adults Who Reported Eating Fewer Than Five Servings of Fruits and Vegetables a Day, by Sex, 2000**



Source: CDC, Behavioral Risk Factor Surveillance System.

## CDC's National Leadership

In fiscal year 2002, Congress appropriated \$27.5 million for CDC to address physical inactivity, poor nutrition, and obesity. These funds allowed CDC to support 12 states to plan for and initiate nutrition and physical activity programs to help prevent and control obesity and other chronic diseases. With fiscal year 2003 funding of \$34 million, CDC will expand these programs and support research to increase physical activity and improve nutrition in states and communities.

### Expanding the Knowledge Base

The landmark *Physical Activity and Health: A Report of the Surgeon General*, published in 1996, brought together the results of decades of research on physical activity and health. CDC research is continuing to shed light on the role of physical activity and nutrition in health:

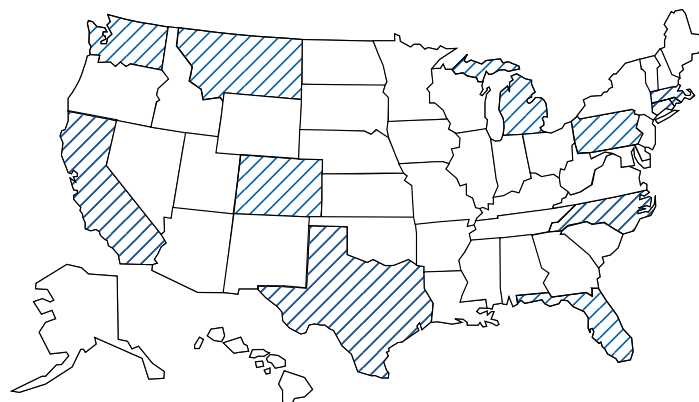
- A CDC analysis of data from the Bogalusa, Louisiana, heart study found that overweight and obesity among children aged 5–17 years had more than tripled from 1973 to 1994 in that community. Moreover, 58% of overweight children had at least one additional risk factor for cardiovascular disease.
- In 2001, CDC released the physical activity chapter in the *Guide to Community Preventive Services*. The *Guide* comes from an evidence-based review of studies in several different areas by the Task Force on Community Preventive Services and identifies science-based strategies to increase physical activity among children and adults.
- Through CDC's Prevention Research Centers network, CDC and the National Institutes of Health developed better methods to measure physical activity levels among minority and low-income women older than 40.
- CDC is collecting information to better understand factors that affect levels of walking and cycling. The GreenStyles Survey, supported by CDC and the Environmental Protection Agency, assesses the effects of environmental, social, and personal variables on walking and cycling. CDC is also working with partners to collect information on how bike paths and sidewalks affect rates of physical activity.

### Promoting Healthy Lifestyles

Since the 1950s, the infrastructure to support walking and bicycling in the United States has been neglected. Trips made by walking or cycling have declined by more than 40% since 1977. CDC's Active Community Environments initiative works with partners to promote the development of accessible recreation facilities and more opportunities for walking and cycling. Current projects include

- Encouraging children to walk to and from school in groups accompanied by adults, through CDC's KidsWalk-to-School Program. Walking to school helps children be more physically active, practice safe pedestrian skills, and learn about their environment.
- Partnering with the National Park Service's Rivers, Trails, and Conservation Assistance

### CDC Funding for Physical Activity and Nutrition Programs to Address Chronic Diseases and Obesity, Fiscal Year 2002



Program to promote the development and use of neighborhood parks and recreation facilities.

- Developing a guidebook for public health practitioners to use in working with transportation and city-planning organizations to promote walking, cycling, and neighborhood recreation facilities.

The National 5 A Day program, launched 10 years ago, is implementing recommendations from a recent comprehensive review. The most significant recommendations were to strengthen and expand the organizational structure of this program to include new partners, and to support research, surveillance, and applied public health programs to increase vegetable and fruit consumption. The National Cancer Institute, the U.S. Department of Agriculture, and CDC are defining the roles and responsibilities of each partner in the new model.

CDC and its partners have developed the *HHS Blueprint for Action on Breastfeeding*, which establishes a comprehensive national breastfeeding policy. Breastfeeding protects against obesity and increases the acceptability of fruits and vegetables among infants.

### Promoting the Use of Growth Charts

In 2000, CDC released new pediatric growth charts that better reflect the nation's diversity. In addition to revising the existing charts, which are used to track growth, CDC added two body-mass-index-for-age charts to help health professionals identify weight problems among children and adolescents. CDC also provides Web-based interactive training modules and resources ([www.cdc.gov/growthcharts](http://www.cdc.gov/growthcharts)) to help users interpret the growth charts.

### Future Directions

CDC will continue to work with its public health partners to create and modify programs, policies, and practices that support healthy lifestyles. In addition, CDC is striving to expand health communications to promote physical activity and good nutrition in work sites, schools, and health care settings.

### State Programs in Action

Funded by CDC, the **North Carolina Healthy Weight Initiative** enhances the state's pediatric nutrition surveillance system and implements programs designed to improve the nutrition and physical activity patterns of children and adolescents aged 2-18 and their families. The initiative's plan, *Moving Our Children Toward a Healthy Weight: Finding the Will and the Way*, focuses not only on behavior changes but also on the organizational, community, and societal changes necessary to support healthy eating and physical activity. A pilot intervention in eight North Carolina counties is delivering health messages to children aged 2-5 from low-income families.

Through a partnership with the University of **Colorado** Health Sciences Center, the CDC-funded Colorado Physical Activity and Nutrition Program is implementing *Colorado on the Move*. This intervention was initially established in two communities, one with a large rural population and the other in an urban, African American setting. Program participants are offered pedometers and encouraged to walk 2,000 steps a day more than they walked before the program. The intervention will eventually introduce a nutrition component as well, most likely the 5 A Day campaign. This program illustrates the role of community-based programs in promoting small behavior changes over time to achieve long-term health benefits.

CDC is working with HHS to develop and implement *Steps to a HealthierUS*, a new initiative that advances the President's *HealthierUS* goal of helping Americans live longer, better, and healthier lives. Through the *Steps* initiative, CDC's National Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases will partner with other HHS agencies and local, state, and federal organizations to support programs that foster healthy lifestyle choices such as good nutrition and regular physical activity.

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